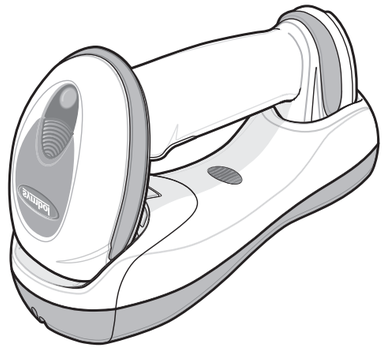
STB4208/4278 Cradle

Quick Reference Guide



© 2008 MOTOROLA, INC. All rights reserved.

Motorola reserves the right to make changes to any product to improve reliability, function, or design.

Motorola does not assume any product liability arising out of, or in connection with, the application or use of any product, circuit, or application described herein.

No license is granted, either expressly or by implication, estoppel, or otherwise under any patent right or patent, covering or relating to any combination, system, apparatus, machine, material, method, or process in which Motorola products might be used. An implied license exists only for equipment, circuits, and subsystems contained in Motorola products.

Warranty

For the complete Motorola hardware product warranty statement, go to: http://www.symbol.com/warranty.

Patents

This product is covered by one or more patents. For patent information go to: http://www.symbol.com/patents.

MOTOROLA

Motorola, Inc.
One Motorola Plaza
Holtsville, New York 11742, USA
1-800-927-9626
http://www.symbol.com

MOTOROLA and the Stylized M Logo and Symbol and the Symbol logo are registered in the U.S. Patent and Trademark Office. All other product or service names are the property of their respective owners.
© Motorola, Inc. 2008

72-71010-01 Revision B — February 2008

Regulatory Information

This device is approved under the Symbol Technologies brand; Symbol Technologies, Inc., is the Enterprise Mobility business of Motorola, Inc. (“Motorola”).

All Symbol devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required.

Any changes or modifications to Symbol Technologies equipment, not expressly approved by Symbol Technologies, could void the user's authority to operate the equipment.

Antennas: use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

Radio Modules

The STB4278 contains an approved radio module. This module is identified below.

Symbol Bluetooth™ Radio, Type: LMX5452.

Bluetooth® Devices

The STB4278 is an approved Bluetooth device. Bluetooth ID: BTXXXXX.

Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

FCC RF Exposure Guidelines

Safety Information

The device complies with Internationally recognized standards covering Specific Absorption Rate (SAR) related to human exposure to electromagnetic fields from radio devices.

Reducing RF Influence – Use Properly

It is advisable to use the device only in the normal operating position and it is recommended that no part of the human body be allowed to come too close to the antenna during operation of the equipment.

To satisfy FCC RF exposure requirements, a mobile transmitting device must operate with a minimum separation distance of 20 cm or more from a person’s body.

Power Supply

Use only a Symbol-approved power supply (p/n 50-14001-001R) output rated 5 VDVC and minimum 650mA. The power supply is certified to EN60950-1 with SELV outputs. Use of alternative power supply will invalidate any approval given to this device and may be dangerous.

Benutzen Sie nur eine Symbol Technologies genehmigt Stromversorgung (p/n 50-14001-001R) in den Ausgabe: 5 VDVC und minimum 650mA. Die Stromversorgung ist bescheinigt nach EN60950-1 mit SELV Ausgaben. Bei Verwendung eines anderen Netzteils werden alle für das Gerät gewährten Genehmigungen außer Kraft gesetzt, und der Betrieb kann gefährlich sein.

Radio Frequency Interference Requirements-FCC

Tested to comply with FCC Standards
FOR HOME OR OFFICE USE

Radio Transmitters (Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio Frequency Interference Requirements-Canada

Radio Transmitters

This device complies with RSS 210 of Industry & Science Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Label Marking: The Term “IC:” before the radio certification only signifies that Industry Canada technical specifications were met.

Marking and European Economic Area (EEA)

Bluetooth for use through the EEA have the following restrictions:

- Maximum radiated transmit power of 10mW EIRP in the frequency range 2.400-2.4835 GHz
- Belgium outside usage, the equipment is restricted to 2.460 -2.4835 GHz frequency range
- Italy requires a user license for outside usage.

Statement of Compliance

Symbol Technologies, Inc., hereby, declares that this device is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 89/336/EEC and 73/23/EEC. Declaration of Conformities may be obtained from http://www2.symbol.com/doc/.

Country Approval

Regulatory markings are applied to the device signifying the radio (s) are approved for use in the following countries: United States, Canada, Australia, Japan & Europe.

Please refer to the Symbol Declaration of Conformity (DoC) for details of other country markings. This is available at http://www2.symbol.com/doc/.

Waste Electrical and Electronic Equipment (WEEE)

English: For EU Customers: All products at the end of their life must be returned to Motorola for recycling. For information on how to return product, please go to: http://www.symbol.com/environmental_compliance.

Bulgarish: За клиенти от ЕС: След края на полезния им живот всички продукти трябва да се връщат на Motorola за рециклиране. За информация относно връщането на продукти, моля отидете на адрес: http://www.symbol.com/weeelink.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skončení jejich životnosti vrátit společnosti Motorola k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: http://www.symbol.com/environmental_compliance.

Dansk: Til kunder i EU: Alle produkter skal returneres til Motorola til recirkulering, når de er udtjent. Læs oplysningerne om returnering af produkter på: http://www.symbol.com/environmental_compliance.

Deutsch: Für Kunden innerhalb der EU: Alle Produkte müssen am Ende ihrer Lebensdauer zum Recycling an Motorola zurückgesandt werden. Informationen zur Rücksendung von Produkten finden Sie unter http://www.symbol.com/environmental_compliance.

Eesti: EL klientidele: kõik tooted tuleb nende eluea lõppedes tagastada taaskasutamise eesmärgil Motorola'ile. Lisainformatsiooni saamiseks toote tagastamise kohta külastage palun aadressi: http://www.symbol.com/environmental_compliance.

Español: Para clientes en la Unión Europea: todos los productos deberán entregarse a Motorola al final de su ciclo de vida para que sean reciclados. Si desea más información sobre cómo devolver un producto, visite: http://www.symbol.com/environmental_compliance.

Ελληνικά: Για πελάτες στην Ε.Ε.: Ολα τα προϊόντα, στο τέλος της διάρκειας ζωής τους, πρέπει να επιστρέφονται στην Motorola για ανακύκλωση. Για περισσότερες πληροφορίες σχετικά με την επιστροφή ενός προϊόντος, επισκεφθείτε τη διεύθυνση http://www.symbol.com/environmental_compliance στο Διαδίκτυο.

Français : Clients de l'Union Européenne : Tous les produits en fin de cycle de vie doivent être retournés à Motorola pour recyclage. Pour de plus amples informations sur le retour de produits, consultez : http://www.symbol.com/environmental_compliance.

Italiano: per i clienti dell'UE: tutti i prodotti che sono giunti al termine del rispettivo ciclo di vita devono essere restituiti a Motorola al fine di consentirne il riciclaggio. Per informazioni sulle modalità di restituzione, visitare il seguente sito Web: http://www.symbol.com/environmental_compliance.

Latviešu: ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpakaļ Symbol otrreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Motorola, lūdzu, skatiet: http://www.symbol.com/environmental_compliance.

Lietuvių: ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti grąžinti utilizuoti į kompaniją „Motorola“. Daugiau informacijos, kaip grąžinti gaminį, rasite: http://www.symbol.com/environmental_compliance.

Magyar: Az EU-ban vásárlóknak: Minden tönkrement terméket a Motorola vállalathoz kell eljuttatni újrahasznosítás céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalókért látogasson el a http://www.symbol.com/environmental_compliance weboldalra.

Malti: Għal klijenti fl-UE: il-prodotti kollha li jkunu waslu fl-aħħar tal-ħajja ta' l-użu tagħhom, iridu jiġu rritornati għand Motorola għar-riċiklaġġ. Għal aktar tagħrif dwar kif għandek tirritorna l-prodott, jekk joġġbok żur: http://www.symbol.com/environmental_compliance.

Nederlands: Voor klanten in de EU: alle producten dienen aan het einde van hun levensduur naar Motorola te worden teruggezonden voor recycling. Raadpleeg http://www.symbol.com/environmental_compliance voor meer informatie over het terugzenden van producten.

Polski: Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy zwrócić do firmy Motorola w celu ich utylizacji. Informacje na temat zwrotu produktów znajdują się na stronie internetowej http://www.symbol.com/environmental_compliance.

Português: Para clientes da UE: todos os produtos no fim de vida devem ser devolvidos à Motorola para reciclagem. Para obter informações sobre como devolver o produto, visite: http://www.symbol.com/environmental_compliance.

Românesc: Pentru clienţii din UE: Toate produsele, la sfârşitul duratei lor de funcţionare, trebuie returnate la Motorola pentru reciclare. Pentru informaţii despre returnarea produsului, accesaţi: http://www.symbol.com/weeelink.

Slovenski: Za kupce v EU: vsi izdelki se morajo po poteku življenjske dobe vrniti podjetju Motorola za reciklažo. Za informacije o vraèilu izdelka obišèite: http://www.symbol.com/environmental_compliance.

Slovenčina: Pre zákazníkov z krajín EU: Všetky výrobky musia byť po uplynutí doby ich životnosti vrátené spoločnosti Motorola na recykláciu. Bližšie informácie o vrátení výrobkov nájdete na: http://www.symbol.com/environmental_compliance.

Suomi: Asiakkaat Euroopan unionin alueella: Kaikki tuotteet on palautettava kierrätettäväksi Motorola-yhtiöön, kun tuotetta ei enää käytetä. Lisätietoja tuotteen palauttamisesta on osoitteessa http://www.symbol.com/environmental_compliance.

Svenska: För kunder inom EU: Alla produkter som uppnått sin livslängd måste returneras till Motorola för återvinning. Information om hur du returnerar produkten finns på http://www.symbol.com/environmental_compliance.

Service Information

If you have a problem using the equipment, contact your facility’s Technical or Systems Support. If there is a problem with the equipment, they will contact the Motorola Enterprise Mobility Support at: http://www.symbol.com/contactsupport.

For the latest version of this guide go to: http://www.symbol.com/support.

Introduction

The cordless scanner cradle acts as a stand, host communication interface, and charger for the LS4278 cordless scanner. It can sit on a desktop or be mounted on a wall.

There are two configurations of the cradle:

- STB4278-C0001WR/STB4278-C0007WR (white/twilight black): charging cradle with radio for desk/wall mounting
- STB4208-C0001R/STB4208-C0007R (white/twilight black): charging cradle only for desk/wall mounting.

The STB4278 cradle receives data from the scanner via a Bluetooth radio, and sends that data to the host through an attached cable. The cradle also charges the scanner’s internal battery pack when the scanner is inserted. The scanner can be charged from an external power supply or using a powered host cable.

This document provides basic instructions on setting up and using the cradle. Unless otherwise noted, “cradle” refers to both configurations of the cradle. Any discussion of transmission of information refers specifically to the STB4278 cradle.

Accessories

The following equipment may be needed:

- Power supply for desk/wall mounting configuration (p/n 50-14001-001R).
- Mounting bracket for vertical mount configuration.

Save the shipping container for storing or shipping. Inspect all equipment for damage. If anything is damaged or missing, call an authorized Customer Support Representative immediately.

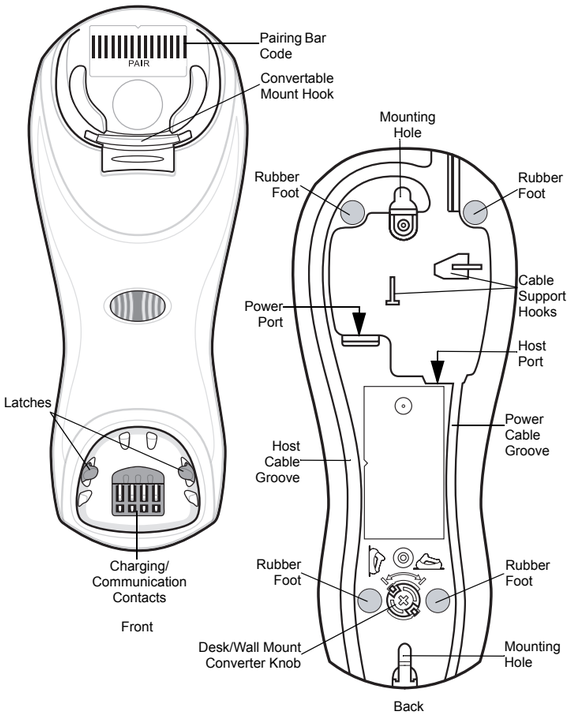
Related Documentation

Symbol LS4278 Product Reference Guide, p/n 72-69834-xx.

Symbol LS4278 Quick Reference Guide, p/n 72-69835-xx.

This documentation is available at: http://www.symbol.com/manuals.

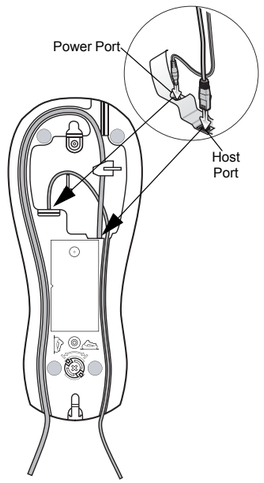
Cradle Parts



Cradle Connections

Important: Connect the interface cable and power supply (if necessary) in the following order to ensure proper operation of the scanner and cradle:

1. Insert the interface cable into the cradle's host port.
2. Connect the other end of the interface cable to the host, if needed.
3. If necessary, connect the power supply to the cradle's power port (if required by the interface, or to allow fast charging of the scanner).
4. Connect the appropriate cable to the power supply and an AC power source, if necessary.
5. If applicable, thread the interface cable over the cable support hook and run the host and power cables into their respective cable grooves.
6. If necessary, scan the appropriate host bar code (for non-autodetected interfaces). Refer to the *Product Reference Guide*.



Changing the Host Interface

To connect to a different host, or to the same host through a different cable:

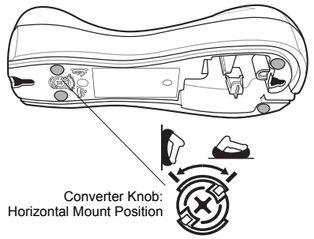
1. Unplug the power supply from the cradle.
2. Unplug the interface cable from the host.
3. Connect the interface cable to the new host, or the new interface cable to the existing host.
4. Reconnect the power supply, if required.
5. If necessary, scan the appropriate host bar code (for non-autodetected interfaces). Refer to the *Product Reference Guide.*

CAUTION If the scanner does not recognize the host, disconnect the power supply, then reconnect after connecting the host cable.

Mounting the Cradle

Horizontal Mount

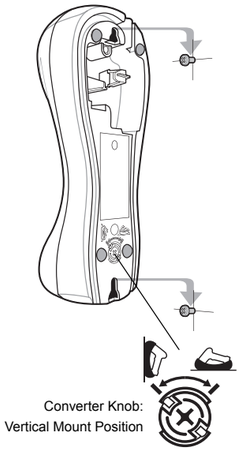
1. Ensure the desk/wall mount converter knob is in the correct position, shown at right.
2. If mounting the cradle horizontally where no fastening is necessary, ensure the rubber feet are attached to the cradle. These feet provide traction and prevent surface damage.



Vertical Mount

To mount the cradle on a vertical surface:

1. Use a Philips screwdriver to turn the desk/ wall mount converter knob to the position shown at right. The front latches protract to engage the depressions at the base of the scanner's handle.
2. Ensure the convertable mount hook on the front of the cradle is inserted with the hook facing up. If not, remove and reverse the hook so that it is in position to secure the scanner in place.



3. Attach the interface and power cables to the appropriate ports (see *Cradle Connections*).
4. Position the mounting template on the mounting surface.
5. Using the screw hole notations on the wall mount template, mark the surface to determine the location of the screw holes.
6. Pre-drill holes to accommodate six #8 Pan head screws, 5/8" in length.
7. Screw the bracket onto the surface ensuring that the front and bottom screws are screwed against the height tabs (see Wall Mount Template).
8. Press the cables into the cradle cable grooves.
9. Align the cradle mounting holes with the screws on the mounting surface and snap the cradle securely into place on the surface.
10. Place the scanner in the cradle.

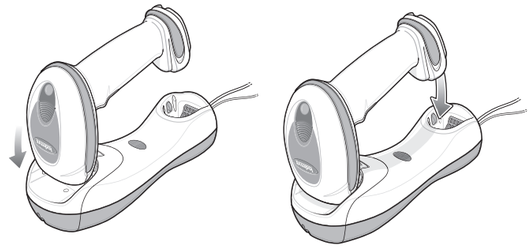
✓ ***NOTE*** For your convenience, a mounting bracket can be purchased from Motorola. For the appropriate measurements, use the wall mount template included in this guide.

Inserting the Scanner in the Cradle

To insert the scanner in the cradle:

1. Insert the scanner top first. When the cradle is mounted in a vertical position, ensure the convertable mount hook on the front of the cradle is inserted with the hook facing up. If not, remove and reverse the hook so that it is in position to secure the scanner in place.

2. Push the handle until it clicks into place, engaging the contacts in the cradle and scanner.



Sending Data to the Host Computer

The cradle receives data from the scanner via a wireless radio connection and transmits it to the host computer via the host cable. The scanner and cradle must be paired for successful wireless communication.

Pairing

Pairing registers a scanner to the cradle and the scanner and cradle can exchange information. The STB4278 operates in two mode: scanner-to-cradle and multi scanner-to-cradle. In scanner-to-cradle mode, the scanner is paired to the cradle either by insertion into the cradle (if pairing on insertion is enabled), or by scanning the pairing bar code. In multi scanner-to-cradle mode, up to three scanners can be paired to one cradle. A multipoint bar code must be scanned to activate this feature.

The cradle includes pairing bar codes on both its front and back. To pair the scanner with the cradle, scan a pairing bar code. A high-low-high-low beep sequence followed by a low-high beep sequence indicates successful pairing and connection to the remote device. A long low, long high beep sequence indicates unsuccessful pairing. Refer to the *Product Reference Guide* for more information.

Lost Connection to Host

If scanned data does not transmit to the cradle's host, ensure that all cables are firmly inserted and the power supply is connected to an appropriate AC outlet. If scanned data still does not transmit to the host, reestablish a connection with the host:

1. Disconnect the power supply from the cradle.
2. Disconnect the host interface cable from the cradle.
3. Wait three seconds.
4. Reconnect the host interface cable to the cradle.
5. Reconnect the power supply to the cradle, if required.
6. Reestablish pairing with the cradle by scanning the pairing bar code.

✓ ***NOTE*** The STB4278 does not always require a power supply whereas the STB4208 always requires a power supply.

Charging the Scanner Battery in the Cradle

To charge the scanner battery, place the scanner in the cradle (see *Inserting the Scanner in the Cradle*). The battery begins charging when the scanner LED indicator starts flashing green. A complete charge of a fully discharged battery can take up to three hours using external power and up to five hours using non-external cable power.

LED Charging Indications

When powered up, the cradle LED is always green. Refer to the *LS4278 Quick Reference Guide* for scanner LED indications.

Using a Host Interface to Supply Power

Some hosts can provide power to the cradle via the host interface, instead of an external power supply.

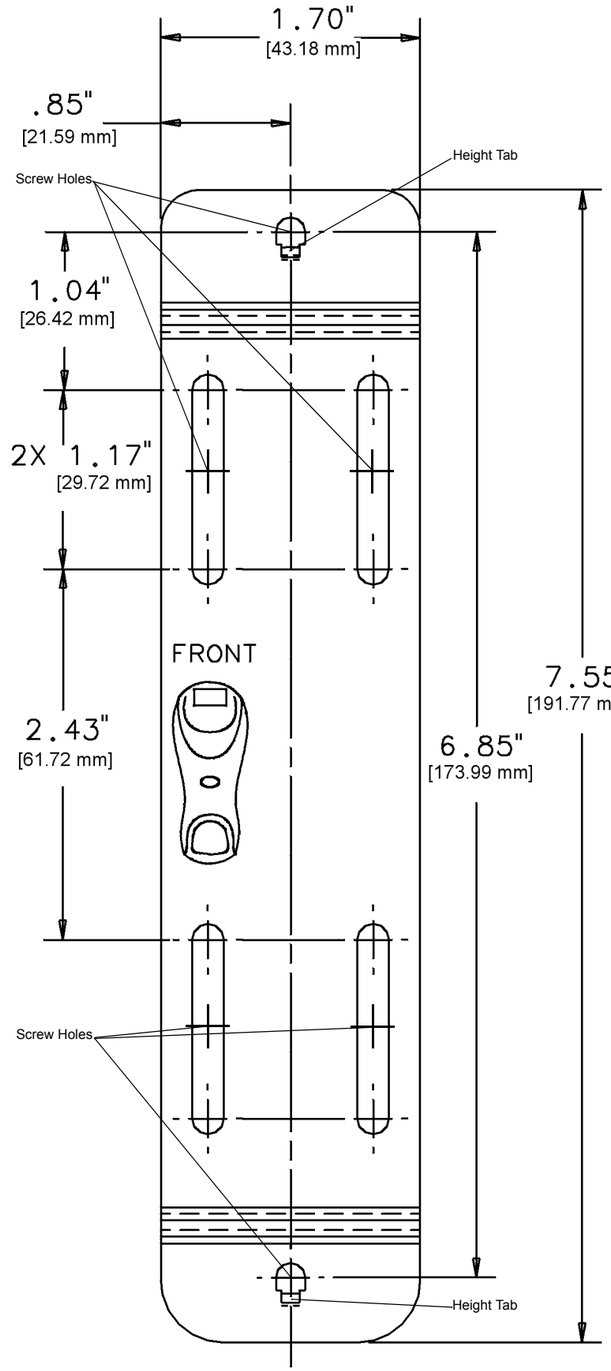
Troubleshooting

If the cradle does not work after following the previous procedures:

- Check the system power.
- Check for loose cable connections.
- Check that the scanner is inserted properly in the cradle.
- Check that the host settings are correct and the cradle is connected to the appropriate port on the host.

CAUTION Do not pour, spray, or spill any liquid on the cradle.

Wall Mount Template



Dimension Tolerance = ± .02 in (± .5 mm)